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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/692,949	10/24/2003	Yun Luo	TRW(TE)-6489	2115

7590 04/22/2005

TAROLLI, SUNDHEIM, COVELL & TUMMINO L.L.P.  
SUITE 1111  
526 SUPERIOR AVENUE  
CLEVELAND, OH 44114-1400

EXAMINER
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BEAULIEU, YONEL

ART UNIT	PAPER NUMBER
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3661

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/692,949

**Applicant(s)**

LUO ET AL.

**Examiner**

Yonel Beaulieu

**Art Unit**

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 13, 14, 18, 21-23, 27-29, 32, 37 and 40 is/are rejected.
- 7) ☒ Claim(s) 4-6, 9-12, 15-17, 19, 20, 24-26, 30, 31, 34-36, 38 and 39 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/24/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 3, 13, 14, 21 - 23, 27, 32, 33, 37 are rejected under 35 U.S.C. 102(b) as being anticipated by Clegg et al. (US 5,477,459).

Regarding claims 1, 2, 3, 13, 14, 21 - 23, 27, 32, 33, and 37, Clegg et al. teaches determining the location of an object in an area of interest (see fig. 12 in combination with fig. 9 at least) comprising an imaging device (101) for obtaining an image of the area; at least three identifying marks located at predetermined positions in the area of interest (fig. 9); a memory (col. 6, lines 57 – 67 and col. 8, lines 29 – 32 at least); and a controller (120) for determining whether the imaging device is calibrated properly by analyzing the obtained image to determine the positions of the marks and the object location based upon view obstruction or not (col. 7, lines 1 – 39; col. 15, lines 37 – 59; col. 17, line 53 – col. 18, line 49 at least); the cameras being spaced apart from one another (see figs. 10 and 11 at least); the controller forming a three-dimensional image from the two-dimensional images (note abstract at least).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 8, 18, 28, 29, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clegg et al. ('459) as applied to claims 1, 13, 21, and 32 and further in view of Franke et al. (US 2004/0032493 A1).

As discussed above, Clegg teaches all of the limitations except for making the area of interest a passenger compartment of a vehicle and the inclusion of controlling an inflatable airbag.

However, Franke et al teaches, in the same of endeavor of determining the location of an object in an area of interest, interest a passenger compartment of a vehicle and the inclusion of controlling an inflatable airbag (see figs. 2 and 3; note ¶¶0012, 0039, and 0042).

It would have been obvious to one of ordinary skill in the art of determining a location of an object to have modified Clegg's teaching by including interest a passenger compartment of a vehicle and the inclusion of controlling an inflatable airbag as evidenced by Franke et al. in order to promote safety (note ¶0011).

***Allowable Subject Matter***

Claims 4 – 6, 9 – 12, 15 – 17, 19, 20, 24 – 26, 30, 31, 34 – 36, 38, and 39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The art of record fail to teach a controller in an area of interest location determining apparatus which analyzes exposure images being outside of a predetermined exposure range and determines and indicates an image device's view is obstructed when a blob having a size that is outside of a predetermined blob size range; three identified marks being formed from dye; a near infrared illuminator illuminating a vehicle passenger compartment.

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***Conclusion***


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yonel Beaulieu whose telephone number is (571) 272-6955. The examiner can normally be reached on M-W 9-3; F 9-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas BLACK can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Y. BEAULIEU  
AU 3661

  
YONEL BEAULIEU  
PRIMARY EXAMINER